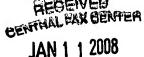
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PATENT

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Amendments To The Claims

The listing of claims presented below will replace all prior versions, and listings, of claims in the application. .

Listing of claims:

- (previously presented) A metal-insulator transition switching transistor, comprising:
 - a silicon substrate;
 - a gate electrode formed directly on the substrate;
 - a gate insulation film on the gate electrode and the silicon substrate;
- an abrupt metal-insulator-transition channel layer on the gate insulation film, wherein the abrupt metal-insulator-transition channel layer changes from an insulator phase to a metal phase abruptly, or vice versa, depending on a variation of an electric field; and

a source and a drain being contacted with both sides of the abrupt metalinsulator-transition channel layer, respectively.

- (previously presented) The metal-insulator-transition switching transistor as 2. claimed in claim 1, wherein the substrate is made of silicon.
- (original) The metal-insulator-transition switching transistor as claimed in claim 3. 1, wherein the source and the drain is a double layer constituted by materials selected from the group consisting of either a chrome (Cr) layer and a gold (Au) layer or a tungsten (W) layer and a titaniun (Ti) layer.

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4. (previously presented) The metal-insulator-transition switching transistor as claimed in claim 1, wherein the abrupt metal-insulator-transition channel layer is composed of a variadium dioxide (VO₂) thin film.

5-9. (canceled)